AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) A storage medium, comprising:

a metallic underlayer;

a ferroelectric data layer over said metallic underlayer, said ferroelectric data layer serving as a layer for storing information as bits defined by a sign of polarization of domains within said ferroelectric data layer, each polarized domain comprising a ~~localized region of~~ volume dipole polarization within said ferroelectric data layer and including an area of bound charge on and adjacent to a surface of said ferroelectric data layer; and

a layer over said ferroelectric data layer having a charge migration rate faster than a charge migration rate of said ferroelectric data layer, said layer over said ferroelectric data layer providing ~~an in-plane~~ a charge dissipation of mobile surface charges on said ferroelectric data layer surface ~~without screening~~ while still permitting said polarized domains to be read.

2-5. (Canceled)

6. (Previously presented) The storage medium of claim 1, wherein said layer over said ferroelectric data layer comprises a conducting layer and a thickness of said conducting layer is within a range of approximately 4 Å to approximately 25 Å.

7. (Original) The storage medium of claim 1, wherein said metallic underlayer comprises $SrRuO_3$.

8. (Currently amended) The storage medium of claim 1, wherein said ferroelectric data layer comprises at least one of:

PZT ($Pb(Zr_x Ti_{1-x})O_3$);

SBT ($SrBi_2Ta_2O_9$);

$BaMgF_4$; and

STN ($Sr_2(Ta_{1-x} Nb_x)_2O_7$); ~~and~~

~~NFM (COVA)~~.

9. (Previously Presented) The storage medium of claim 1, wherein said layer over said ferroelectric data layer comprises a conducting layer and a thickness of said conducting layer is approximately 15 Å.

10-15. (Canceled)

16. (Currently amended) A method of manufacturing a storage medium, said method comprising:

applying a layer of ferroelectric material over a metallic underlayer, said ferroelectric ~~data~~ layer serving as a data layer for storing bit information as bits defined by a sign of polarization of ~~polarized~~ domains within said ferroelectric material layer, each ~~said~~ polarized domain comprising a volume dipole polarization within said ferroelectric data layer ~~region of bound charge~~ and including an area of bound charge on and adjacent to a surface of said ferroelectric data layer; and

applying a layer of conductive material over said ferroelectric layer that provides a charge migration rate faster than a charge migration rate of said ferroelectric layer, said conductive layer thereby providing a ~~an in-plane~~ charge dissipation ~~mechanism~~ of mobile

surface charges on said surface of said ferroelectric layer ~~without screening~~ while permitting said polarized domains to be read.

17-18. (Canceled)

19. (Previously presented) The method of claim 16, wherein a thickness of said conducting layer is approximately 15 Å.

20. (Original) The method of claim 16, wherein said metallic underlayer comprises $SrRuO_3$.

21. (Canceled)

22. (Previously presented) The storage medium of claim 1, wherein said polarized domains are oriented as being substantially normal to said top surface.

23. (Previously presented) The storage medium of claim 1, wherein said information is stored as bits of information, each bit comprising a polarized domain within said ferroelectric data layer that is terminated at said top surface as an area of bound charge on said top surface, said bound charge having one of a positive sign and a negative sign, depending upon an information content of said polarized domain.

24. (Previously presented) The storage medium of claim 1, wherein said layer over said ferroelectric data layer comprises silicon.

25. (Previously presented) The storage medium of claim 1, wherein said charge migration time in said layer over said ferroelectric data layer is less than 10^{-10} second.

26. (Currently amended) The storage medium of claim 1, wherein said layer over said ferroelectric data layer directly contacts a top surface of said ferroelectric data layer to protect against a ~~slow~~ surface depolarization of said ferroelectric data layer.

27. (Canceled)